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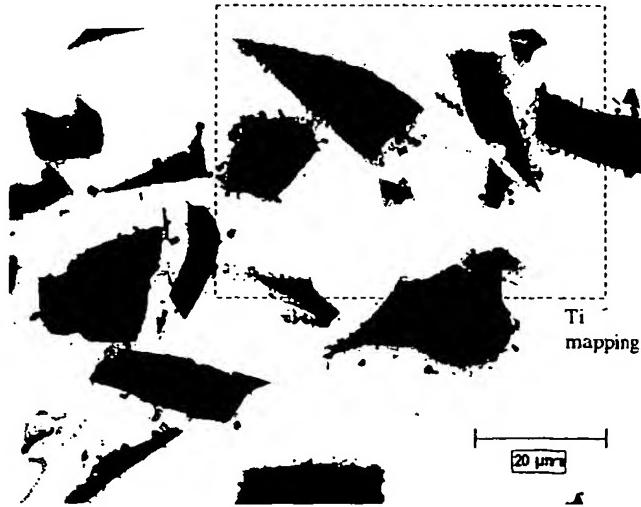
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- (71) Applicant (for all designated States except US): ALCAN INTERNATIONAL LIMITED [CA/CA]; 1188 Sherbrooke Street West, Montreal, Québec H3A 3G2 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FORTIN, Jean-Yves [CA/CA]; 2297 Du Bois, Jonquière, Québec G7S 4S1 (CA). SHEEHY, Jacques [CA/CA]; 2476 rue des Merles, Jonquière, Québec G7X 8B3 (CA). JEAN,
- Camil [CA/CA]; 2717 Ross, Jonquière, Québec G7S 1W3 (CA). BRISSON, Paul [CA/CA]; 3136 St Patrick Street, Jonquière, Québec G7S 5R1 (CA). HARNISCH, Uta [CA/CA]; 670 chemin Sydenham, Chicoutimi, Québec G7H 2G5 (CA). DOUTRE, Don, Allen [CA/CA]; 963 Dawson Court, Kingston, Ontario K7P 2H6 (CA). CHEN, Xiao-Guang [CA/CA]; 3076 St-Georges, Jonquière, Québec G7S 1W4 (CA).
- (74) Agents: EADES, Norris, M. et al.; Kirby Eades Gale Baker, Box 3432, Station D, Ottawa, Ontario K1P 6N9 (CA).
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(54) Title: IMPROVED ALUMINUM ALLOY-BORON CARBIDE COMPOSITE MATERIAL



(57) Abstract: A cast composite material is prepared by furnishing an aluminum-based matrix alloy and forming a mixture of free-flowing boron carbide particles and the aluminum-based matrix alloy in molten form which is stirred to wet the matrix alloy to the boron carbide particles and to distribute the particles throughout the volume of the melt. The molten mixture is then cast. The fluidity of the molten mixture is maintained by (a) maintaining the magnesium content of the matrix metal below about 0.2 % by weight, or (b) starting with a matrix metal containing less than 0.2 % by weight magnesium and adding further magnesium to the mixture a short time before casting, or (c) having at least 0.2 % by weight titanium present in the mixture.

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